

## **Question 12. Do frontline staff receive training about how to prevent transmission of MRSA and other multidrug-resistant organisms (MDROs)?**

You indicated that you do not have training for frontline staff about how to prevent multidrug-resistant organism (MDRO) transmission or that training is ineffective. Daily patient care is crucial to the prevention of MRSA and other MDRO transmission. Thus, buy-in and competency of nursing and frontline staff are crucial for success. Frontline staff training to prevent MDRO transmission should focus on: proper hand hygiene, personal protective equipment use, Contact Precautions, cleaning and disinfection of the environment and equipment and communicating a patient's infection status to frontline staff or during inter- and intra-hospital transfers.

### **A. Strategies for Training and Educating Frontline Staff**

- Key concepts to emphasize include:
  - Hand hygiene with alcohol-based hand rub is the preferred method of hand hygiene unless a hospital or unit has high endemic rates of CDI or hands are visibly soiled. Hand hygiene should be performed prior to donning (putting on) gloves and after doffing (removing) gloves. It is important to emphasize that glove use is not a replacement for hand hygiene.
  - Five moments of hand hygiene: 1) Before touching a patient; 2) before providing a clean or aseptic procedure; 3) after direct contact with a body fluid; 4) after touching a patient; and 5) after touching surfaces around a patient.
  - Current guidelines recommend that both patients with active infections and those colonized with MDROs should be placed into Contact Precautions.
  - MDROs frequently contaminate the patient's environment and patient care equipment; many MDROs can live for days and weeks, some months, on hard surfaces.
- Consider your audience when designing trainings. Frontline staff include multiple roles and disciplines, individuals from different cultural backgrounds, varying ages and different levels of education and literacy.
- Strategies to engage adult learners include:
  - Ensuring a clear understanding of expectations
  - Setting goals together
  - Assessing current knowledge before training
  - Relating learning to past experiences and practical situations
  - Sequencing learning experiences to build confidence, then challenge when comfortable
  - Creating a safe learning environment

- Use existing team meetings and huddles to train and revisit key concepts about preventing MDRO transmission. This helps integrate training into daily workflow and prevent it from becoming onerous.
- Consider using stories to help highlight key educational material and the impact MDROs have on patients. Helping frontline staff appreciate the risk and impact MDROs have on patient well-being will help enhance their engagement in training. Sharing stories will also help tap into individuals' internal motivators (knowledge, attitudes, beliefs and values), which help to inspire human behavior.
- Share infection prevention data with staff. Data transparency can help motivate and engage staff to continue prevention efforts. Consider sharing the days the hospital or unit has gone without a MRSA infection. Staff can use this information to remind colleagues that proper hand hygiene will help them continue the hospital or unit's success of days since the last infection.
- Host unit-level competitions to help motivate and engage staff. A PPE contest using whipped cream or chocolate pudding on gloved hands to see which staff/unit can doff (remove) PPE without "contaminating" themselves is just one example of how learning can be fun, insightful and memorable. Or consider tracking unit compliance rates over time, rewarding the unit(s) that can maintain the highest hand hygiene or PPE use compliance rates.

#### B. Strategies for Assessing Competency and Compliance

- Assessing competence is how you validate the skills, knowledge and attitude of the frontline staff after completing training.
- Learners remember 10% of what they read, 20% of what they hear, 30% of what is seen, 50% of what is heard and seen, and 80% of what is heard, seen and done.
- Four levels of clinical competence:
  1. Knows. Did the learner gain a basic level of knowledge? Simple pre-/post-tests are useful to measure basic knowledge.
  2. Knows How. Does the learner understand how to apply the new knowledge? Case studies can test the learner's knowledge and promote critical thinking and application of new knowledge.
  3. Shows. Is the learner able to demonstrate the new skills? Simulations are a way to provide a controlled environment in which learners can practice and demonstrate application of skills.
  4. Does. Does the learner independently perform the skill in practice? This may be assessed by observing personnel during direct patient care or work duties.
- Audit implementation of MDRO prevention best practices to ensure that frontline staff are competent in MDRO prevention skills. Simply having these policies and trainings in place is not enough to ensure patient safety. Rather, auditing best practices helps to make sure that best practices are being properly and effectively implemented.
- Use audits and compliance monitoring to assess opportunities for improvement in staff education and training and address gaps in clinical practice.

- Engage patients and families to assist with auditing of best practice compliance. For example, you can ask patients and families to remind providers to clean their hands before care or swab the hub on a central line before accessing it. One state hospital association had small hand fans made to give to patients that said, “Remember to clean your hands” the patient or family could hold them up when needed, instead of having to speak up. Educating and engaging patients in safety processes is very useful to drive best practice.

## Tools, Resources and Further Reading

- STRIVE Content:
  - [Strategies for Preventing Healthcare Associated Infections](#) (SP 101)
  - Competency-Based Training, Audits and Feedback ([CBT 101](#), [CBT 102](#))
  - [Hand Hygiene](#) (HH 101, HH 102, HH 103)
  - [Personal Protective Equipment Use](#) (PPE 101, PPE 102, PPE 103, PPE 104)
  - Environmental Cleaning ([EC 101](#), [EC 102](#))
  - MRSA Tier 1 Course ([MRSA 101](#), [MRSA 103](#))
- [WHO Hand Hygiene Observation Form](#)
- [Donning and Doffing PPE for Contact Precautions Skills Competency Checklist](#)
- [Environmental Cleaning Audit Template](#)
- Calfee DP, Salgado CD, Milstone AM, et al. Strategies to prevent methicillin-resistant *Staphylococcus aureus* transmission and infection in acute care hospitals: 2014 Update. *Infect Control Hosp Epidemiol*. 2014; 35:772-96.
- Miller GE. The assessment of clinical skills/competence/performance. *Academic Medicine*. 1990; 65(9):S63-7.
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- Tilley S, Donna D. Competency in nursing: A concept analysis. *J Continuing Ed Nursing*. 2008; 39(2):58-64.
- Whelan L. Competency Assessment of Nursing Staff. *Orthop Nurs*. 2006; 25(3):198-202.